

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION CITY VIEW PLAZA II, SUITE 7000 GUAYNABO, PUERTO RICO 00968-8069

June 26, 2012

Mr. Luis Figueroa
President,
Battery Recycling Company, Inc.
P.O. Box 1016
Arecibo, Puerto Rico 00613-1016

The United States Environmental Protection Agency ("EPA" or "Agency") has reviewed Battery Recycling Company, Inc.'s (BRC's) stack test protocol and cover letter dated June 6, 2012, and received by EPA via email on June 18, 2012. According to EPA's Order CAA-02-2012-1004 (Order), BRC was required to submit these protocols by May 9, 2012. EPA has reviewed this information and has concluded that it does not contain sufficient information to enable the Agency to complete the review of this protocol for approvability. The specific deficiencies are listed in Attachment 1 (enclosed).

EPA acknowledges receiving yet another submittal of documents hand delivered by BRC officials in response to the Order on June 25, 2012. EPA is currently processing this information for review. As soon as the review of this additional information is completed, EPA will advise BRC of its findings.

Please note that the Order requires BRC to conduct stack tests of the furnaces using an EPA-approved protocol by July 31, 2012. Failure to conduct testing by the due date using an EPA-approved protocol is a violation of EPA's Order. Therefore, it is imperative that BRC provide us with the requisite information as soon as possible so that we can complete our review in time in order to have BRC conduct the required stack tests in accordance with the Order. If necessary, EPA can convene a conference call with BRC's stack testing consultants to ensure that they fully understand what is expected by EPA pursuant to the Order.

If you have any questions concerning this letter, please call Héctor Vélez or Francisco Claudio of my staff at 787-977-5850 or 787-977-5841, respectively. Any specific questions concerning the stack testing should be addressed to Kai Tang at 732-321-4364.

Sincerely,

Teresita Rodriguez Acting Deputy Director
Caribbean Environmental Protection Division

U.S. Environmental Protection Agency - Region 2 Division of Environmental Science and Assessment Monitoring and Assessment Branch June 25, 2012

DESA Preliminary Comments on *Particulate*, *Lead and Visible Emissions Sampling Protocol-Combined Baghouse Stack* (the Protocol). The Protocol, with a cover date of June 6, 2012 is submitted to the EPA via email on June 18, 2012 by the Battery Recycling Company, Inc. (BRC), Arecibo, Puerto Rico. The PDF-version of the Protocol which EPA received has a file creation date of June 18, 2012.

The June 18, 2012 Protocol is not approvable. Among other deficiencies, BRC's Protocol submittal does not respond to the requirements set forth in Section III of EPA Administrative Order CAA-02-2012-1004 (AO). The Protocol appears to be a minor update to two previous protocols prepared for stack tests conducted during 2010. BRC's current submittal continues to lack full description of its operations, facility equipment, and production processes, for EPA to conduct an informed evaluation of the proposed compliance stack tests. The EPA expects to have additional comments as more responsive material are provided by BRC; nonetheless, Protocol deficiencies indentified at this time include but are not limited to the following:

- 1. Protocol is not responsive to the First Bulleted Item in Section III of the AO: The EPA has repeatedly asked BRC to provide adequate facility equipment diagrams, including engineering drawing(s) of its facility and equipment from points of emissions generation, including fugitive emissions, through the end of the respective exhaust stack including but not limited to furnaces and other manufacturing equipment, baghouses, enclosures, ducts for air/emissions transport, draft-inducing fans, flow guide vanes, and process monitoring/measuring equipment. The EPA requests were made in comments emailed to BRC prior to a February 29, 2012 conference call with BRC and its counsel and test consultant, and during that conference call. BRC had committed to emailing to the EPA a PDF copy of such drawing(s) that very day, February 29, 2012. BRC has not provided such a PDF file or hardcopy of such drawing(s) since that time, or in the current Protocol submittal.
- 2. Protocol is not responsive to the Second Bulleted Item in Section III of the AO: During the February 29, 2012 conference call, the EPA asked BRC to provide a detailed "asbuilt" drawing of its exhaust stack and exhaust duct work from the two baghouses to show how the flow paths are combined into the single exhaust stack. BRC was supposed to send this drawing to the EPA by March 9, 2012. BRC has not provided such a PDF file or hardcopy of such drawing(s) since that time, or in the current Protocol submittal.
- 3. Protocol is not adequately responsive to the Third Bulleted Item in Section III of the AO: Although the Protocol repeats the list of process stream and emissions control equipment data as information that BRC will collect during the stack test, there is no indication of what specific parameters will be measured and how they are measured and recorded.

- 4. Protocol is not responsive to the Fourth Bulleted Item in Section III of the AO: During the February 29, 2012 conference call, BRC said it will look into how it can document and demonstrate representative baghouse operation, bag cleaning cycle, etc. BRC has not provided to EPA any such information since that time. The current Protocol submittal is missing the historical baghouse operation monitoring data required by the AO.
- 5. Inadequate information in Section 1.2 for EPA to specify baghouse operation during test runs: BRC shall provide to EPA detailed information on the baghouses and their respective cleaning cycle including but not limited to: type(s) and number of bags per compartment, bag cleaning methodology, duration of cleaning cycle from the time a compartment is taken offline to the time it is put back in service, and the duration of the actual bag cleaning event. EPA will then specify to BRC those baghouse operating conditions that shall be deployed during the performance tests. EPA's determination will be consistent with 40 CFR 63.7(e)(1) and the expectation that the testing conditions will challenge to the fullest extent possible the facility's ability to meet emission limits.
- 6. Inadequate information in Section 1.2 for EPA to specify facility operations and emissions sampling regimen during test runs: BRC shall provide to EPA detailed information on the six-hour batch process including but not limited to: timing and duration of charging activities, timing and duration of tapping activities, and the nature, duration, and capacity of all facility operations from which emissions are routed into the respective emissions control equipment. EPA will then specify to BRC those facility operating conditions and emissions sampling regimen (including but not limited to the sampling duration at a traverse point, the sequence of traverse points progression, and the sequence of visible emission observations) that shall be deployed during the performance tests. EPA's determination will be consistent with 40 CFR 63.7(e)(1) and the expectation that the testing conditions will challenge to the fullest extent possible the facility's ability to meet emission limits.
- 7. <u>Inadequate test runs planned</u>: The AO requires BRC to complete all performance testing on the air pollution control devices associated with its two furnaces (the Second and Third Furnaces). However, Table 1.1 of the Protocol indicates that only one set of three test runs is planned during the proposed three-day testing program.
- 8. <u>Missing test plan information on Emission Control Hoods Face Velocity Verification:</u>
 BRC indicates in Section 1.1 that it intends to conduct such face velocity verification.
 However, the Protocol has no further information beyond what is in this introductory paragraph.
- 9. <u>Inadequate minimum sampling volume</u>: Table 1.1 of the Protocol indicates that BRC intends to collect a minimum sample volume of 30 dry standard cubic feet (dscf) for each test run. However, the test method requirements in 40 CFR 63.547(a)(5) specify that the minimum sample volume must be 2.0 dry standard cubic meters (70 dscf) for each run.

- 10. Missing discussion on process data collection and documentation in Section 1.4: BRC needs to provide description of analytical, sampling, or other procedures for obtaining process stream, control equipment, process control, and programmable logic controller data. BRC will need to include these data in the Source Test Report to demonstrate representative plant and process operations during the performance tests. Example printouts of these data need to be provided in the Protocol. These requirements are consistent with the expectations of what need to be included in a test protocol. See *Preparation and Review of Site-Specific Emission Test Plans*, Emission Measurement Center Guideline Document (GD-042), March 1999 (available from http://www.epa.gov/ttn/emc/guidlnd/gd-042.pdf).
- Inadequate discussion on Sampling Point Determination in Section 2.1.1: There is no discussion on confirming that BRC's exhaust stack arrangement is free of cyclonic flow during the performance tests. More importantly, BRC provided no discussion on the effect of the "baffle" (unidentified thick vertical line depicted inside the stack as shown on the diagram labeled as "Combination Baghouse Exhaust Stack Battery") on flow characteristics and test results when only one baghouse exhaust stream is introduced into the stack. The opposing half without flow would have the effect as another settling chamber on the exhaust flow stream.
- 12. <u>Missing section on Reporting and Data Reduction Requirements</u>: See GD-042 as referenced above.
- Missing section on Plant Entry and Safety: See GD-042 as referenced above. BRC also must provide a discussion on OSHA Lead requirements for personal protective equipment, housekeeping, and hygiene facilities for its test consultants and for regulatory agency test observers.